

AMENDMENTS TO THE SPECIFICATION

At page 1, delete lines 1-15.

INTERNATIONAL PATENT OFFICE
WORLD ORGANIZATION FOR INTELLECTUAL PROPERTY
International patent published on
the basis of the Patent Cooperation Treaty
INTERNATIONAL PUBLICATION NO. WO 2004/108415 A2

International Patent Classification⁷: B41F 23/04
International Patent Application No.: PCT/EP2004/004934
International Application Date: May 8, 2004
International Publication Date: December 16, 2004
Submission Language: German
Publication Language: German
Priority
Date: June 5, 2003
Country: DE
No.: 103 25 771.3

CONTROL FOR AN EXCIMER EMITTER

At pages 1-3, delete the following:

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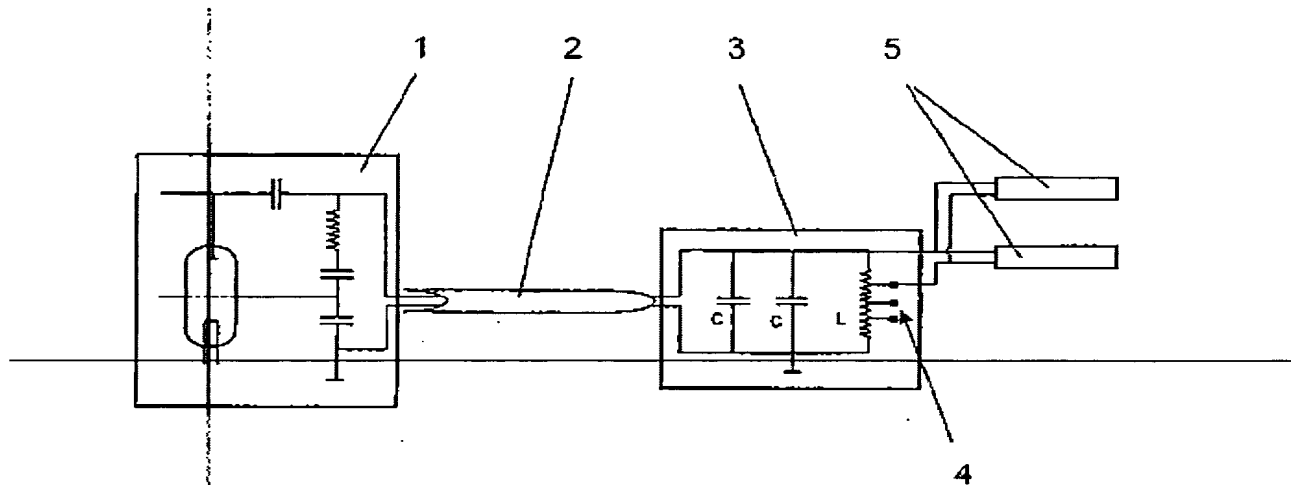
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 _____ Published:
 _____ Without an international search report and will be
 _____ republished once more after the report is received.

~~For an explanation of the two-letter codes and the other abbreviations, reference is made to the explanations ("Guidance Notes on Codes and Abbreviations") at the beginning of each regular issue of the PCT Gazette.~~



(57) Abstract: The invention relates to a control for an excimer emitter, particularly for the dryer in a printing press, comprised of an HIF generator that is connected on the output side to an excimer emitter. The aim of the invention is to improve the design of a control of this type for an excimer emitter as to enable a higher UV intensity of radiation. To this end, the invention provides that: the HIF generator (1) is provided in the form of a tube-type generator with a feedback: the output of the HF generator (1) is connected to the input of a working circuit (3) comprising a capacitor (C) and an inductive resistor (L), and; the excimer emitter (5) is connected to the output of the working circuit (3).

Patent application

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At page 3, line 5, delete -- Description -- and insert the following heading:

FIELD OF THE INVENTION

Replace the paragraph beginning at page 3, line 6 with the following:

The invention concerns a control for an excimer emitter ~~according to the~~
preamble of Claim 1.

At page 3, line 8, delete -- State of the art --, and insert the following heading:

BACKGROUND OF THE INVENTION

Replace the paragraph beginning at page 3, line 9 with the following:

UV driers are used both in sheet-fed and web-fed printing presses. Traditional UV driers are designed as mercury discharge lamps. The disadvantage with such UV driers is that with these broad-band radiating lamps, a relatively large amount of ozone is formed, which

must be suctioned off and conducted to the outside. Special UV lamps for driers are excimer emitters, which emit a monochromatic UV radiation. In actual practice, emitters are frequently used here, which emit a wavelength of 308 nm. An advantage of such an emitter is that a heating of the paper does not take place, since the radiation does not contain any IR fractions. With a wavelength of 308 ~~nm~~ ~~mm~~ ~~[sic; nm]~~, ozone formation does not take place either. There is also a better utilization of the electrical input power for the drying process.

At page 4, line 24 delete -- Goal of the invention --, and insert the following heading:

SUMMARY OF THE INVENTION

Replace the paragraphs beginning at page 4, line 25, with the following:

The ~~goal~~ object of the invention under consideration is to expand a control for an excimer emitter, ~~in accordance with the preamble of Claim 1,~~ in such a way that a higher UV radiation strength can be attained.

This goal is attained by the control for an excimer emitter of the invention. ~~characterizing feature of Claim 1. Refinements of the invention can be deduced from the subordinate claims. Examples~~ In accordance with the invention, provision is made so that the control of the excimer emitter takes place by means of ~~an especially~~ a specially adapted HF generator, which is designed as a self-exciting single-circuit generator with a water-cooled transmitting tube and which holds an internal or external working circuit, via which the excimer emitter tube is connected to the generator. The output is ~~hereby~~ coupled into the excimer emitter via water-cooled capacitors and resonant-circuit inductances.

In accordance with the preferred embodiment of the invention, the working circuit connecting the HF generator to the excimer emitter is constructed so that it is located externally and shielded electrically. This externally located and electrically shielded working circuit is then connected to the HF generator via an HF cable. The working circuit itself is thereby in the vicinity of the excimer emitter. ~~The possibility is hereby produced of connecting~~ This arrangement makes it possible to connect several excimer emitters to the working circuit.

Another development of the invention consists of ~~also~~ integrating the transmitting tubes into the unit which holds the working circuit. Thus, it is also possible to ~~provision~~ provide power to several excimer emitters located in one printing unit or another device of the printing press from one working circuit.

An advantageous development of the invention provides for the inductive resistor in the working circuit, via which the HF generator is connected to the excimer emitter, to be constructed in an adjustable or changeable manner, so that the discharge characteristics of the excimer emitter can be adapted ~~exactly~~ correctly for the entire output range and thus an

optimal coupling of the HF output into the barrier discharge of the emitter can be attained. Provision can be made hereby to use an adjustable inductive resistor. Alternatively, it is also possible to use an inductive resistor with several tap possibilities. What is used then is the inductive resistor which produces the best discharging characteristics.

~~Furthermore, the~~ The explanation of an embodiment example of the invention is ~~carried out set forth below~~ with the aid of the drawing.

BRIEF DESCRIPTION OF THE DRAWING

~~This shows the generator, in accordance with the invention,~~

FIGURE 1 shows a generator constructed in accordance with an embodiment of the invention with a working circuit and the excimer emitter connected to it.

Replace the paragraph beginning at page 5, line 30 with:

The excimer emitters 5 are located in a ~~not depicted~~ printing press (not depicted) and are used for drying of the stock. The working circuit 3 is assigned to the excimer emitters 5 - that is, is located in their vicinity. Via the HF cable 2, a distance of a few meters between the HF generator 1 and the working circuit 3 can be bridged over. Thus, it is possible to set up the HF generator next to the printing press.

At page 6, delete lines 4-11.

Reference symbol list

- 1 — ~~HF Generator~~
- 2 — ~~HF Cable~~
- 3 — ~~Working circuit~~
- 4 — ~~Tap~~
- 5 — ~~Excimer emitter~~
- C — ~~Capacitor~~
- L — ~~Inductive resistor~~